Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use	)	ET Docket No. 94-32

COMMENTS OF TDS TELECOMMUNICATIONS CORP.

TDS Telecommunications Corp. (TDS Telecom), by its attorneys, files these comments in response to the Commission's Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.[1] The proceeding is considering how to allocate the first 50 megahertz of spectrum withdrawn from Federal government use pursuant to the Omnibus Budget Reconciliation Act of 1993[2] and made available for private sector licensing by this Commission. TDS Telecom urges the Commission to pair the 2390-2400 MHz band with the 2300-2310 MHz band and allocate the paired bands for fixed wireless local loop service in state-recognized local exchange carrier service areas, especially those in rural areas.[3]

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[1] Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, FCC 94-272 (released Nov. 8, 1994) (NPRM).

[2] Pub. L. No. 103-66, 107 Stat. 3212 (approved August 10, 1993).

[3] The 2300-2310 MHz band has been identified preliminarily for transfer to private sector use. NPRM para. 17. The Commission requested immediate finalization and sought comments on its usefulness paired with the 2390-2400 MHz band. The almost universal public benefits of using this spectrum to increase the efficiency of fixed local telephone and access services warrants

TDS Telecom agrees with Southwestern Bell (NPRM, para. 13) that radio loops will expedite deployment, reduce the costs of service to new customers and reduce telephone service maintenance costs. Access to adequate spectrum to provide local loops to new customers whenever radio technology would be more cost effective than wire loops will reduce the cost of infrastructure to provide service that has become an economic and social necessity. The option of deploying radio loops can extend the public switched network to remote locations, widely scattered homes and businesses in rural America, and wherever else wire installation or maintenance has been costly or difficult. Radio technology can enable a LEC to install upgrades and replacement facilities, even before the inadequacy, age or obsolescence of existing facilities or the unavailability of additional wires (e.g., for fax or computer connectors) adversely affects customers. Radio loops may also provide access to new services, including voice, data and even video applications.

The availability of radio loops will be particularly valuable in rural areas. Sparse population requires longer loops, which raise the cost of constructing, improving, maintaining and replacing telecommunications infrastructure. Radio loop technology will make the public switched network more cost effective. If the local exchange carrier charged with providing affordable communications on reasonable request

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prompt availability for private sector use and prompt allocation to this high value public network use.

throughout the service area may select from all available technologies, it can deploy the lowest cost, most efficient network and facilities mix.

All local exchange carriers should be allowed to evaluate radio technology as an alternative for connecting subscribers and to apply for radio licenses where radio loops "prove in" as the technology of choice. The predicted market growth for PCS has generated research and improvements for wireless telephony. Wide use of radio technology for public switched network loops can continue to bring the cost of equipment down by spurring technology improvements and tapping economies of scale in manufacturing. Wide use also provides an incentive for continuing research and development. The economies of wider use, a bigger market for wireless technology and adequate frequencies could solve some of the problems of high cost and spectrum congestion or unavailability that have plagued BETRS service.[4]

Section 307(b) of the Communications Act requires the Commission to distribute licenses and frequencies "among the several states and communities" so as to "provide a fair, efficient, and equitable distribution to each of the same."[5] The best way for the Commission to accomplish that mandate --

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[4] USTA has pending a request to increase the availability of spectrum for BETRS. The pair of frequency bands requested here will meet the needs of the nation's telephone consumers better. Based on historical information, TDS Telecom believes that if there had been enough available BETRS spectrum, many rural customers could have been served with wireless loops at a reduced cost.

[5] 47 U.S.C. Section 307(b).

especially for the towns, farms and ranches of rural America -- would be to make the 2390-2400 MHz and 2300-2310 MHz bands available for licensing by LECs in their state-recognized local exchange service areas. Larger service areas of the kind selected for PCS and cellular generally tend to focus development in the major population centers. Areas served by small and rural telephone companies are most likely to benefit if those local exchange companies that specialize in service to rural areas can decide when to use radio or wire loops.

Providing another option for adding customers to the backbone public local distribution networks and, thus, another tool for cost management will best fulfill the Commission's laudable intent (NPRM, para. 8) "to ensure that the spectrum is put to its best and most valued use and that the greatest benefit to the public is attained." Existing cost and rate averaging and other methodologies spread costs over the interstate MTS and WATS ratepaying public and LEC customers to make service available throughout the U.S. As a result, virtually everyone benefits from cost savings and improved efficiency in the public switched telephone network.

Traditional "wireline" telephone service is priced to achieve broad subscription and use for residents and businesses everywhere. The other proposed uses for the 2390-2400 MHz and 2300-2310 MHz pair are for non-essential services. The Commission has already devoted a large spectrum allocation for innovative mobile uses via its broadband, narrowband and

unlicensed PCS policies. The fixed use network should now gain access to wireless technology and resulting cost savings, too. The In-Flight Phone Corporation scheme described in the NPRM (para. 12) would furnish entertainment services to air travelers -- a luxury use for a limited group of beneficiaries. And, even though Southwestern Bell says the requested allocation is not compatible with shared Amateur Services use, the Southwestern Bell proposal we support would have the potential for benefiting more members of the general public by permitting more cost effective and efficient fixed telephone service on the public switched telephone network.

Potential loop cost savings can particularly help with the rural high cost problem. Competition in urban areas puts pressure on LECs to lower their costs in the dense areas where competition is most feasible and their rates are above their deaveraged costs. Technology which reduces costs for the universal service provider will help ease the pressures to deaverage, thus helping to prevent a huge rural-urban gap in telecommunications prices.

As noted, radio loops are just another technology for providing the essential connection into the public switched telephone network. Telephone companies that must provide area-wide service as borrowers under the Rural Electrification Administration (REA) and Rural Telephone Bank (RTB) programs need to justify the design and cost of their construction and upgrade projects to the REA. It makes financial and policy sense

to make all technologies that can cut costs available for these LECs, so that this effective source of rural development funding gets even more value for each federal dollar.

A well-designed, efficient, reasonably priced and widely subscribed public network has long been a central national goal.[6] An efficient, reasonably priced network benefits customers in both high costs rural areas and low cost urban areas because of "externalities." The economic explanation for this benefit to the entire public switched network is that each subscriber to a network or customer of an advanced offering benefits every other subscriber or customer. However each individual measures how much he is willing to pay solely on the basis of personal benefits. Reaping the external benefits at a lower cost and encouraging even more widespread connection and use, therefore, contributes to network efficiency, universality and advances in network capabilities.

The Commission's proposal to give licensees wide technical discretion has merit. However, the spectrum should be restricted to fixed use, except for incidental mobile use and cordless telephones using CPE linked to fixed service installations. Adequate spectrum -- these two requested 10 MHz bands -- should be allocated on a primary basis for licensing in each LEC's service area to prevent the spectrum constraints that have

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[6] Courts have recognized the "prominence" of the "universal service" goal deriving from Section 1 of the Communications Act of 1934. National Association of Regulatory Utility Commissioners V. FCC, 737 F.2d 1095, 1108 (D.C. Cir. 1984).

prevented BETRS from serving LECs' need for a cost-effective radio loop alternative.

Conclusion

The Commission should pair and allocate the 2390-4000 MHz and 2300-2310 MHz bands for local exchange area licensing to local telephone systems to use for local loops whenever they believe radio technology would be more efficient and less costly than wireline technology. This choice of technology would allow LECs to lower the cost to all users of the public switched network, help reduce the disparity between high and low cost loops and "ensure that the spectrum is put to its best and most valued use." The ability to deploy and license radio loops in many of the nation's small and rural communities, we believe, will ensure that "the greatest benefit to the public is attained" from this spectrum reclaimed from federal government use.

TDS urges the Commission to adopt and implement the radio local loop frequency allocation for local exchange carriers proposed by Southwestern Bell as soon as possible.

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CERTIFICATE OF SERVICE

I, Richard D. Massie, a secretary in the law firm of Koteen & Naftalin, do hereby certify that I have this date caused the foregoing Comments of TDS Telecommunications Corp. to be sent by first class United States Mail, postage prepaid, to the following:

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December 19, 1994

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